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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,352	09/16/2003	Michael Y. Frankel	4450-0403P	2063
47372	7590	09/08/2005		
BIRCH, STEWART, KOLASCH & BIRCH, LLP 8110 GATEHOUSE ROAD SUITE 100 EAST FALLS CHURCH, VA 22042-1248			EXAMINER BLEVINS, JERRY M	
			ART UNIT 2883	PAPER NUMBER

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/662,352

Applicant(s)

FRANKEL, MICHAEL Y.

Examiner

Jerry Martin Blevins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2005.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
4a) Of the above claim(s) 17 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-16 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 09/16/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Claim 17 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 08/12/2005.

Applicant's election of species 1 in the reply filed on 08/12/2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In the present case, the abstract exceeds the maximum allowable 150-word limit. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10 and 12-15 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pre Grant Publication to Xiao et al., number 2002/0101636.

Regarding claim 1, Xiao teaches an optical node apparatus (Figures 3-6) comprising a through path coupler (Figure 6, element 626) having at least first and second outputs (corresponding to output ports 646 and 648), the through path coupler configured to optically connect to an input port (elements 644 and 646) for receiving an input optical signal and configured to provide a first through optical signal on the first output and a second through optical signal on the second output (Figure 6); a first optical filter (652a) for optically connecting to the first output port and configured to filter the first through optical signal; and a selective connector (optical switch 630) configured for enabling selective optical connection to an output of the first optical filter, wherein the second output port is configured to accept a second optical filter (652b) and the selective connector is configured to switch optical connection to an output of the second optical filter without any substantial disruption to an operation of the optical node apparatus (page 5, paragraphs 40 and 41).

Regarding claim 2, Xiao teaches the limitations of the base claim 1. Xiao also teaches that the second optical filter is an upgraded filter relative to the first optical filter (Figure 4 and page 3, paragraphs 20-26).

Regarding claim 3, Xiao teaches the limitations of the base claim 1. Xiao also teaches a drop coupler (608a, 608b) optically connected to the input port and outputting the input optical signal to the through path coupler via a through path and also outputting the input optical signal to a drop path (Figure 6); and an add coupler (610a, 610b) optically connected to receive the output of the first or second optical filter selected by the selective connector and optically connected to an add path for outputting an output optical signal to an output port (Figure 6).

Regarding claim 5, Xiao teaches the limitations of the base claim 3. Xiao also teaches a first variable optical attenuator (636) placed between the first optical filter and the selective connector; and a second variable optical attenuator (638) placed between the second optical filter and the selective connector (Figure 6).

Regarding claims 4 and 6, Xiao teaches the limitations of the base claims 3 and 5, respectively. Xiao also teaches that the selective connector is an optical switch (optical switch 630).

Regarding claim 7, Xiao teaches the limitations of the base claim 5. Xiao also teaches that the first and second variable optical attenuators are configured to be operated in a manner such that only one of the attenuators is disabled from attenuating at any given moment (Figure 6 and page 5, paragraph 43).

Regarding claim 8, Xiao teaches the limitations of the base claim 7. Xiao also teaches a combining coupler (654a, 654b) optically connected to the first and second variable optical attenuators as inputs and optically connected to the add coupler (Figure 6).

Regarding claim 12, Xiao teaches the limitations of the base claim 3. Xiao also teaches that the drop coupler is a first drop coupler (608a) and the add coupler is a first add coupler (610a), the optical node further comprising: a first circulator optically placed between the first drop coupler and the through path coupler (note uni-directional transmission lines of Figure 6); a second circulator optically placed between the first add coupler and the selective connector (note uni-directional transmission lines of Figure 6); a second drop coupler (608b) optically connected to the second circulator (Figure 6); and a second add coupler (610b) optically connected to the first circulator (Figure 6), wherein the first circulator is configured to direct optical signal traffic from the first drop coupler to the through path coupler and to direct optical signal traffic from the through path coupler to the second add coupler and the second circulator is configured to direct optical signal traffic from the selective connector to the first add coupler and to direct optical signal traffic from the second drop coupler to the selective connector (Figure 6 and page 4, paragraph 38 – page 5, paragraph 43).

Regarding claim 13, Xiao teaches a fiber optic transmission system (Figures 3-6) comprising: a plurality of transmitters (such as transmitter 624, Figure 6, which is repeated for every dashed rectangle 550 in Figure 5) configured to transmit input signals; a multiplexer (element 302.1, Figure 3) connected to a fiber optic line, the

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multiplexer configured to multiplex signals from the plurality of transmitters to the fiber optic line (Figure 3); a demultiplexer (element 302.2, Figure 3) connected to the fiber optic line, the demultiplexer configured to demultiplex signals from the fiber optic line (Figure 3); a plurality of receivers (such as receiver 628, Figure 6, which is repeated for every dashed rectangle 550 in Figure 5); and one or more optical add/drop nodes of claim 3 (Figures 3 and 4, elements 304 and Figures 5 and 6, elements 550) placed between the multiplexer and the demultiplexer (Figure 3).

Regarding claims 9,10 and 14,15 Xiao teaches the limitations of the base claims 3 and 13, respectively. Xiao also teaches that at least one of the first and second optical filters is a spectral blocking filter (at least one of the optical add/drop nodes includes a spectral blocking filter) configured to permit a subset of a spectrum of the input optical signal to pass through while blocking a complementary subset of the spectrum of the input optical signal, wherein the subset is a contiguous portion of the spectrum (page 1, paragraph 6 and page 3, paragraph 20).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xiao in view of US Pre Grant Publication to Moon et al., number 2003/0184843.

Regarding claims 11 and 16, Xiao teaches the limitations of the base claims 9 and 14, respectively. Xiao does not teach that the spectral blocking filter is a reconfigurable blocking filter. Moon teaches a reconfigurable blocking filter (Figures 1-3, 6-11, 17-24, and 27-29, abstract, page 1, paragraph 3, and page 11, claim 4). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the reconfigurable blocking filter of Moon in the optical node apparatus (fiber optic transmission system) of Xiao. The motivation would have been to selectively delete individual channels within the signal (Moon, page 1, paragraph 3 and Xiao, page 1, paragraph 6).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry Martin Blevins whose telephone number is 571-272-8581. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMB


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